Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-Z68

Name: #2040/US40 OUC Rod House Creek.

The bridge referenced herein was inventoried by the Mary Historic Bridge Inventory, and SHA provided the Trust wi The Trust accepted the Historic Bridge Inventory on April determination of eligibility.	th elig	ibility	detern	inatic	ns in	Februa	arv 20	001
MARYLAND HISTOI Eligibility RecommendedX	RICA		JST ility N	ot Pa	20222	on dod		
Criteria:ABCD Considerations:	Α		-					
Comments:								
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Reviewer, OPS:_Anne E. Bruder			Date	:3	April 2	2001_		
Reviewer, NR Program: Peter E. Kurtze			Date	:3	April 2	2001_		
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NAME AND SHA NO.: 3040 LOCATION Road Name and Number: <u>US 40 over Red House Creek</u> Rosedale X vicinity City/Town: Baltimore County: Ownership: X State County Municipal Other Bridge projects over: _ Road _ Railway X Water _ Land Is bridge located within designated district?: _ yes X no ___ NR listed district _ NR determined eligible district locally designated _ other Name of District **BRIDGE TYPE** Timber Bridge Beam Bridge __ Truss-Covered __ Trestle __ Timber-and-Concrete __ Stone Arch Bridge __ Metal Truss Bridge __ Moveable Bridge __ Swing __ Bascule Single Leaf __ Bascule Multiple Leaf __ Vertical Lift __ Retractile __ Pontoon __ Metal Girder __ Rolled Girder __ Rolled Girder Concrete Encased Plate Girder Plate Girder Concrete Encased __ Metal Suspension __ Metal Arch Metal Cantilever X Concrete _ Concrete Arch _ Concrete Slab X Concrete Beam _ Rigid Frame

Type Name ___

_ Other

DESCRIPTION

Describe the Setting:

Located in Maryland's Tidewater physiographic province, Bridge 3040 carries US 40 over Red House Creek in southeastern Baltimore County near the settlement of Rosedale. US 40 spans the primarily southerly-flowing Red House Creek in a northeast to southwest direction. Although wooded areas flank both sides of the creek, residential and commercial buildings erected after the completion of this portion of US 40 in 1935 border both sides of the bridge.

Describe the Superstructure and Substructure: (Discuss points identified in Context Addendum, Section C)

A concrete beam bridge composed of a single 36-foot span with a total length of 40 feet, Bridge 3040 possesses an 80½-foot clear roadway covered by a five-inch bituminous overlay atop the original concrete deck. The bridge carries four lanes of traffic and a paved median flanked by pierced balustrades. W-beam traffic barriers shield the bridge approaches. The bridge's substructure consists of concrete abutments and wing walls.

Much of the bridge displays spalling of concrete surfaces, cracking and efflorescence. A five-foot section near the center of girder G1's span exhibits a full-width, three-inch deep spall exposing reinforcing bar in addition to random longitudinal and horizontal cracking and efflorescence. Girders G6 through G11 display edge spalling and longitudinal cracks as well as stalactites and efflorescence. G6 also possesses a 20-foot long spall along its bottom surface exposing concrete aggregate and rusting tension bars. The balustrades also show spalling and exposed reinforcing members. Both abutments and wing walls have deep vertical and diagonal cracking and surface erosion. The northeast and southwest wing walls have also become misaligned by over five inches.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Slightly more than two-thirds (76) of that total were single-span bridges.

Discuss major alterations:

A search of State Highway Administration records and State Roads Commission reports has not indicated that any major alterations to Bridge 3040 have occurred. A 1975 inspection report noted that four balusters had been knocked out of a balustrade. However, current photographs do not illustrate any missing balusters.

HISTORY

When Built: 1934

Why Built: Initial construction of New Philadelphia Road, now US 40.

Who Built: State Roads Commission

Who Designed: Unknown

Why Altered: Balusters knocked out circa 1975 may have been replaced.

Was this bridge built as part of an organized bridge building campaign?: Yes.

During the early 1930s, the State Roads Commission built a 30-mile, dual-lane divided highway linking Baltimore and Aberdeen. Designed to alleviate traffic congestion along the much-traveled Philadelphia Road (current MD 7) tracing much of the original, Colonial era road between Baltimore and Philadelphia, the New Philadelphia Road became Maryland's principal new construction effort of the 1930s. Erected on an entirely new alignment bypassing established towns and railroad crossings, the New Philadelphia Road became known as the Pulaski Highway and now forms part of current US 40. Construction of a bridge spanning the Susquehanna River at Havre de Grace and the extension of the New Philadelphia Road further east to the Delaware state line occurred after completion of the Baltimore-Aberdeen section in 1935. Bridge 3040 formed part of the Baltimore-Aberdeen section of the New Philadelphia Road.

SURVEYOR ANALYSIS

This bridge may have NR significance for association with:

X A (Events) B (Person) C (Engineering/Architectural Character)

Was this bridge constructed in response to significant events in Maryland or local history?

Erected in 1934, Bridge 3040 formed part of the New Philadelphia Road built in response to increased automobile use on state roads and the growing inadequacy of the original road system improved by the State Roads Commission (SRC) to handle larger traffic volumes. The SRC's major building effort during the 1930s, and one of the first on a new alignment designed to bypass towns and railroads slowing traffic movement, construction of the road marked a transition from the improvement of earlier roads and turnpikes characterizing the SRC's operations during the early twentieth century to an organization of highway and transportation planners.

When the bridge was built, and/or given a major alteration, did it have a significant impact on the growth and development of the area?

Construction of the New Philadelphia Road provided entry to previously less-accessible areas of southeastern Baltimore and Harford counties and had a significant impact on the area's subsequent development. Bridge 3040 participated in this general trend.

Is the bridge located in an area which may be eligible for historic designation, and would the bridge add or detract from the historic and visual character of the possible district?

Bridge 3040 may contribute to a potential historic district encompassing resources related to development along US 40 after construction of the New Philadelphia Road.

Is the bridge a significant example of its type?

No, this bridge is not a significant example of its type. Many of the character defining elements are in a deteriorated state. In addition, the physical integrity of the bridge's balusters may have been compromised through insensitive replacement.

Does the bridge retain integrity of the important elements described in the Context Addendum?

No, this bridge does not retain integrity of its character defining elements. Sections of many of the bridge's girders and balusters possess deep spalling with exposed reinforcing members and efflorescence. In addition, the abutments and wing walls display deep vertical and diagonal cracking and surface erosion. Two of the wing walls have also become misaligned over five inches.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer, and why?

No, this structure is not a significant example of the work of the State Roads Commission.

Should this bridge be given further study before significance analysis is made, and why?

Yes. Further study may indicate whether a linear historic district encompassing resources associated with the original construction of the New Philadelphia Road during the early 1930s and the surrounding area's subsequent development exist. Bridge 3040 may contribute to this potential historic district.

Date: 13 May 1996

Telephone: (717) 691-1340

MARYLAND INVENTORY OF HISTORIC PROPERTIES HISTORIC BRIDGE INVENTORY MARYLAND STATE HIGHWAY ADMINISTRATION MARYLAND HISTORICAL TRUST

BIBLIOGRAPHY

Spero, P.A.C., & Company, and Louis Berger & Associates

1994 Historic Bridges in Maryland: Historic Context Report. Maryland State Highway

Administration, Baltimore.

State Highway Administration

As-Built Drawings. On file 707 North Calvert Street, Baltimore.

Bridge Inspection Reports. On file 707 North Calvert Street, Baltimore.

State Roads Commission of Maryland

1934 Report of the State Roads Commission of Maryland. Operating Report for the Years

1933 - 1934. Baltimore.

1936 Report of the State Roads Commission of Maryland. Operating Report for the Years

1935 - 1936. Financial Report for Fiscal Year 1936. Baltimore.

Financial Report of the State Roads Commission of maryland for the Fiscal Year 1935

and Addenda Oct 1, 1935 to Jan 31, 1936. Baltimore.

1958 A History of Road Building in Maryland. Baltimore.

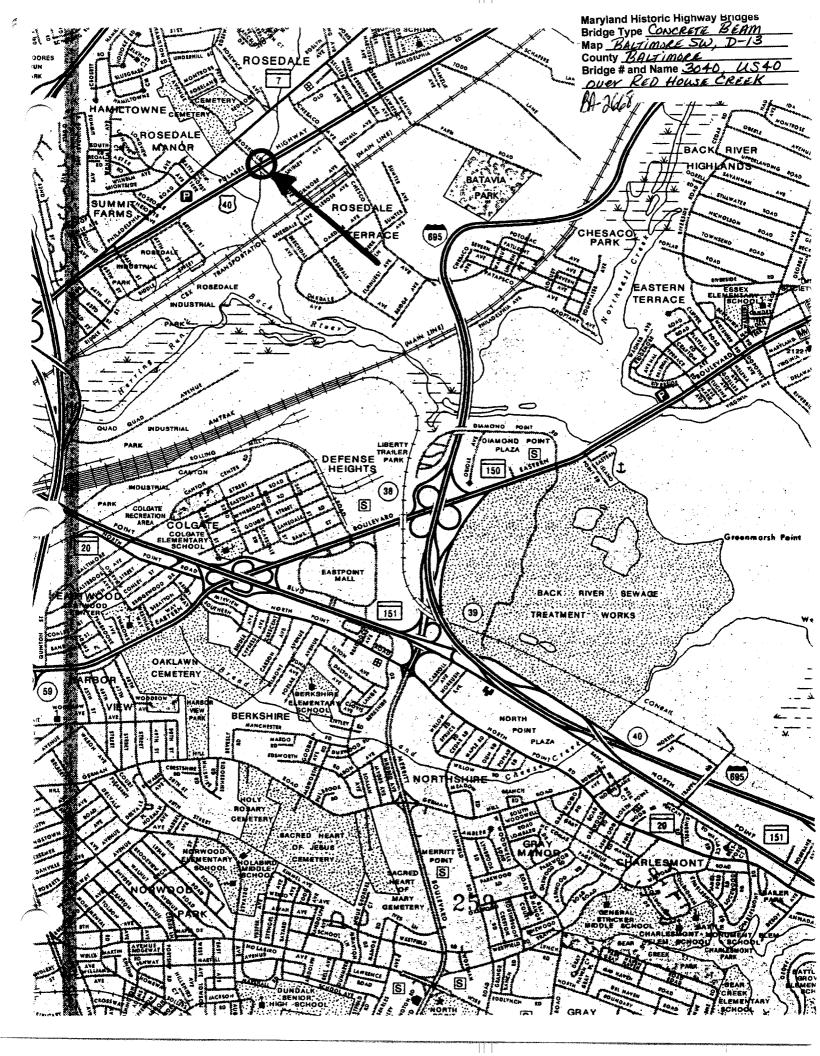
SURVEYOR INFORMATION

Name: Stuart Paul Dixon

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Mechanicsburg, PA 17055





Inventory # <u>Ba-2668</u>

Name 2040 - US 40 OVER REDHOUSE CREE	K
County/State BALTIMORE COUNTY/MD	
Name of Photographer DAVE DIEHL	
Date 195	
Location of Negative SHA	_
Description WEST APPRIACH LOOKING	

Number 14 of 34

EAST



Inventory # BA-2668

Name 3040-US 40 OVER REDHOUSE CREEK County/State BALTIMORE COUNTY/MD Name of Photographer DAVE DIEHL
Date 1195 Location of Negative SHA

Description SOUTH ELEVATION LOOKING NORTHEAST

2 15 of 39 3



Inventory # BN-2668

Name 3040-US40 OVER REPHONSE CREEK	2
County/State BALTIMORE COUNTY/140	
Name of Photographer DAVE DIEAL	
Date 195	

Location of Negative SHA

Description NORTH ELEVATION LOOKING SOUTHEAST

Number 16 of 299



Inventory # BA- Z668

Name 3040- US40 OVER REDHULSE CREEK
County/State BALTIMORE COUNTY/MD
Name of Photographer DAVE DIEHL
Date \\GS
Location of Negative SHA
Description FAST APPROACH WOKING
WEST

Number of 394